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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,113	02/02/2004	Isamu Yatougo	247016US3CONT	5975
22850	7590	08/10/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			VORTMAN, ANATOLY	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/768,113

Applicant(s)

YATOUGO ET AL.

Examiner

Anatoly Vortman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 10/166,686.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims extensively use the clause “adapted to” (claim 1, lines 9 and 11 of the claim; claim 6, lines 2 and 4 of the claim; claim 7, lines 2 and 4 of the claim; claim 8, line 5 of the claim; claim 11, lines 2 and 4 of the claim; claim 13, line 3 of the claim; claims 14 and 15, lines 2 of the claims; claim 16, lines 5 and 7 of the claim; claim 18, lines 5, 7, and 9 of the claim; and, claim 21, lines 5 and 9 of the claim). The use of the clause “adapted to” makes scope of the claims unclear. It has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Also in claim 6, the last three words of the claim “contact each other” make claim indefinite, since it is not clear to which elements of the structure the aforementioned clause is referring.

### *Claim Rejections - 35 USC § 102*

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8, 11, 14, and 15, as best understood, are rejected under 35

U.S.C. 102(b) as being anticipated by US/5,424,915 to Katooka et al.,

(Katooka)(submitted with IDS).

Regarding claim 1, 3, and 5-7, Katooka disclosed (Fig. 2) an electronic unit cooling device for cooling an electronic unit having a plurality of electronic parts, with cooling air, comprising: a cooling panel of a hollow structure, including a housing (1) for passing the cooling air therethrough, the cooling panel including a hollow upper side flat plate portion (3) and a hollow lower side flat plate portion (4) connected together at a hollow side end portion (15), the cooling air passing through the hollow portions of the upper and lower side flat plate portions and side end portion (15); a first heat receiving face (10) formed on said upper side flat plate portion (3) of said cooling panel and includes a plane adapted to be faced by a first electronic unit (11); and a second heat receiving face formed on said lower side flat plate portion (4) of said cooling panel and includes a plane adapted to be faced by a second electronic unit (13).

Regarding claim 8, 14, and 15, Katooka disclosed (Fig. 5) an electronic unit cooling device for housing an electronic unit having a plurality of electronic parts and for cooling said electronic unit with cooling air which is introduced from the outside and discharged to the outside, comprising: a cooling panel (10) of a hollow structure adapted to be faced at an outer surface by at least one electronic unit (11) for passing the cooling

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air therethrough, the cooling air entering through an inlet port of the cooling panel (10) and exiting through an outlet port of the cooling panel (10); and a housing box (1) housing said cooling panel (10) and said electronic unit (11) and having an opening (7) for passing the cooling air to said cooling panel (10), said opening accommodating both the inlet port and outlet port of the cooling panel.

Regarding claim 2, Katooka disclosed (Fig. 2) that said cooling panel includes: an inlet (7) and outlet (8) and a partition (5) for dividing the inside of said cooling panel into a passage leading from said inlet (7) to said outlet (8).

Regarding claim 4, Katooka disclosed (Fig. 2) that said cooling panel includes a communication passage (15) for providing the communication between the inside of said upper side flat plate portion (3) and the inside of said lower side flat plate portion (4), and wherein an inlet (16) of the communication passage (15) is formed in said lower side flat plate portion (4) whereas an outlet (17) of the communication passage (15) is formed in said upper side flat plate portion (3).

Regarding claim 11, Katooka disclosed (Fig. 5) that said cooling panel includes: a first panel unit (4) adapted to be faced by a first electronic unit (13); a second panel unit (3) arranged at a predetermined spacing on the upper side of said first panel unit (4) and adapted to be faced by a second electronic unit (11); and a communication passage (21) for providing the communication between said first panel unit (4) and said second panel unit (3).

***Allowable Subject Matter***

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4. Claims 16-21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

5. Claims 9, 10, 12, 13, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

regarding claims 9, 10 and 18-21, claims 9, 18, and 21 recite: “a seal member”;

regarding claims 12, 16 and 17, claims 12 and 16 recite: “a first communication passage” and “a second communication passage”;

regarding claim 13, the claim recites: “an upward opening” and “a cover member”.

The aforementioned limitations in combination with all remaining limitations of the respective claims and any intervening claims, are believed to render the above-discussed claims patentable over the art of record.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

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US/4699208, 5493457, 5559673, 5869919, 63559779, 6462948, 6538881, and JP/1-95599 disclosed air-cooled electronic and electrical devices.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The Examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anatoly Vortman  
Primary Examiner  
Art Unit 2835

AV